

D1 100. (Twice Amended) The isolated polynucleotide of claim 96, wherein said first nucleic acid encodes a polypeptide fragment which is capable of functioning as a functional domain within a[part of a] mature DR5 polypeptide to induce apoptosis.

D2 118. (Twice Amended) The isolated polynucleotide of claim 114, wherein said first nucleic acid encodes a polypeptide fragment which is capable of functioning as a functional domain within a[part of a] mature DR5 polypeptide to induce apoptosis.

D3 155. (Twice Amended) The isolated polynucleotide of claim 152, which encodes a polypeptide fragment which is capable of functioning as a functional domain within a[part of a] mature DR5 polypeptide to induce apoptosis.

D4 191. (Twice Amended) The isolated polynucleotide of claim 186, wherein said nucleic acid hybridizes to the complement of nucleotides 754 to 1362 of SEQ ID NO:1, and wherein said nucleic acid encodes a polypeptide fragment which is capable of functioning as a functional domain within a[part of a] mature DR5 polypeptide to induce apoptosis.

D5 211. (Twice Amended) The isolated polynucleotide of claim 205, wherein said first nucleic acid encodes a polypeptide fragment which is capable of functioning as a functional domain within a[part of a] mature DR5 polypeptide to induce apoptosis.

D6 272. (Once Amended) [The] An isolated polynucleotide [of claim 271, wherein said polypeptide encodes at least 50] comprising a nucleic acid which encodes a polypeptide comprising 50 contiguous amino acids within amino acids 1 to 360 of SEQ ID NO:2.

273. (Once Amended) The polynucleotide of claim [270]272, wherein said nucleic acid encodes a polypeptide fragment capable of functioning as a functional domain within[as part of] a DR5 extracellular domain to bind TRAIL.

D 274. (Once Amended) The polynucleotide of claim [270]272, wherein said nucleic acid encodes a polypeptide fragment which is capable of functioning as a functional domain within[part of] a mature DR5 polypeptide to induce apoptosis.

275. (Once Amended) The polynucleotide of claim [270]272, further comprising a heterologous polynucleotide.

D 279. (Once Amended) A method of producing a vector that comprises inserting the polynucleotide of claim [170]272 into a vector.

D 280. (Once Amended) A vector comprising the polynucleotide of claim [270]272.

D 282. (Once Amended) A host cell comprising the polynucleotide of claim [270]272.

D 286. (Once Amended) A method of producing a polypeptide comprising culturing the host cell of claim 282 under conditions such that said polypeptide is expressed, and recovering said polypeptide, wherein said polypeptide binds an antibody with specificity for a polypeptide consisting of amino acids 1 to 360 of SEQ ID NO:2.